

REMARKS

In the Office Action mailed February 23, 2011, claims 1-4, 6-8 and 10-36 were pending and indicated as rejected.

By this response, claim 1 has been amended to include the subject matter of claim 36. Claim 36 has been cancelled.

Support for the amendment can be found in the original specification.

Claim Rejections under 35 U.S.C. § 103(a)

I. Claims 1-2, 4, 6-8, 10-14, 20, 26-27 and 32-36 stand rejected as being unpatentable over Roman (US 6,171,602) in view of Deller et al. (US 5,776,240), Hasenzahl et al. (WO 03/037379) and the Degussa Press Release titled “Dry Binder – A New Concept for Pressed Powder.” Applicants respectfully traverse.

Applicants submit that the reference combination is not suggestive of the possibility of an adsorbate as described by the claims which has excellent flow properties, low water content, and high purity of the starting granules. There is a uniform distribution of the active ingredient.

The results shown in the Table appearing on page 47 of the specification clearly establish the advantages for the claimed adsorbate. The form of silica, AEROPRIL®, employed by the invention is compared to precipitated silica- SIPERNAT® 22, SIPERNAT® 50, and Syloid 244 FP (Grace). The tests used for flow rating, slope angle and bulk density are recognized. It is clear from the Table that each of the variables measure show superiority for the claimed product over products which employ a different form of synthetic silica, precipitated silica. It is also clear from the Table that this superiority is more attributable to the form of the silica than to the active ingredient type. The comparative examples each employ Eucalyptus oil as does Example 4. Examples 1-3 are similar to the results shown in Example 4 than are the results reported for the comparative examples. Technical Bulletin No. 31 entitled “Synthetic Silica as a Flow Aid and Carrier Substance” is enclosed for completeness and consideration, especially of, sections 4.1-4.8, 6.1 and 9.

Claim 1 has been amended to include the subject matter of claim 36- the ratio of the substance to the silica granule. The nature of the adsorbate should be more apparent. The function of the silica should be rendered clearer considering the ratio. (The Examiner may have had concerns regarding the breadth of the claims.)

At the apparent heart of the Examiner's position is the selection of the Deller et al. silica product as the silica in the Roman composition. The Roman et al. composition is not a flowable granular silica aggregate containing an active substance; rather it is a multi-component ground pigment mixture. See examples. Examiner must be postulating that with the proposed substitution the claimed product inherently results.

The Roman product is a natural cosmetic composition where a natural color liquid base and absorbent base composed of at least mica; silica bead and dimethylpolysiloxane are first separately formed, mixed and ground. The silica is not identified with more specificity than being porous. The preparatory process is distinct from that disclosed. Consider the ratio of the pigment base to absorbent base. See Example 2.

Deller et al. clearly teach their product as a catalyst support. See, for example, col. 6 at lines 20-34. There is disclosure of pyrogenically produced silica as an adsorption media. This disclosure is in the background section of the patent and describes pyrogenic silica generally. There is no teaching that the use of the Deller product to impart properties like those identified in the Table, referenced above.

Hasenzahl et al. (WO 03/037379) and the Degussa Press Release similarly do not provide the necessary teaching to arrive at the invention as now claimed. The Degussa Press Release does not provide enabling detail relative to the announcements made. At best, it would be an invitation to experiment. Hasenzahl et al. suggest in the paragraph starting at line 11 on page 22 that silica has multiple roles, e.g. carriers and adsorptive agents, and that their granular silica product has a different purpose separate from those. (It appears that the Roman silica use is one of those, which is separate from that of Hasenzahl et al.)

It appears that the art has been assembled based on the teachings provided within Applicants' specification. Even with that teaching, which is improperly relied upon, the art,

taken alone or in combination, does not suggest a path which would have allowed one to arrive at the invention as now claimed.

Further, even if one deems a *prima facie* case to have been properly established, the results shown in the Table, *supra*, show that there is a criticality to the synthetic silica employed. Further it is submitted that the art, relied upon, is not suggestive of the results achieved. The results would be unexpected. There is criticality to the selection of the silica type used in the invention and benefits associated with that selection.

The Examiner is again requested to give the recent BPAI decision in a granular silica application suggests the need for an equivalency teaching in the substitution of one silica type for another. See BPAI opinion number 2009-009246 for Application No. 10/281,223. The current position taken by the Examiner appears to be analogous to the position taken here in the Office Action.

Reconsideration and withdrawal of the rejection are respectfully requested.

II. Claims 1, 3, 28 and 30-31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Minemoto (JP 02049707) in view of Deller et al., Hasenzahl et al., and the Press Release. The rejection as to claims 1, 3, 28 and 30-31 is respectfully traversed.

Minemoto is considered to the extent of the abstract provided. Minemoto teach a B cpd. insecticide absorbed on porous grains in an amount of 5 – 50% by weight. Materials for the grains are identified. The silica is one but is not identified as to type. The characteristics of the porous grains, e.g. spherical, are identified.

Deller et al., Hasenzahl et al., and the Press Release are discussed above.

It appears that the art has been assembled based on the teachings provided within Applicants' specification. Even with that teaching, which is improperly relied upon, the art, taken alone or in combination, does not suggest a path which would have allowed one to arrive at the invention as now claimed.

Further, even if one deems a *prima facie* case to have been properly established, the results shown in the Table, *supra*, show that there is a criticality to the synthetic silica employed. Further it is submitted that the art, relied upon, is not suggestive of the results achieved. The results would be unexpected.

Again, should the Examiner consider a proper *prima facie* case to have been established, it is respectfully requested that the results disclosed in the specification are not suggested by the art of record and therefore are unexpected. The *prima facie* case should then be considered rebutted.

Reconsideration and withdrawal of the rejection are respectfully requested.

III. Claims 1, 19, 21, 29 and 34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Park et al. (US 5,654,258) in view of Deller et al., Hasenzahl et al. and the Press Release. The rejection as to claims 1, 19, 21, 29 and 34 is traversed.

Park et al. teaches a solid, water dispersible, storage stable trifluralin formulation. The trifluralin is supported inside porous, finely divided carrier particles. Suitable carrier particles are described as being silica particles having a surface area of 150 to 250 m²/g and having an absorbed water content of 2 to 12%, preferably 3 to 6% before loading of the trifluralin. H151L257 is identified as the silica used in the examples. H151L257 is a synthetic precipitated silica of a surface area 190-210 sq. meters manufactured by PPG (Taiwan). H151L257 is not a pyrogenic silica nor is it like the claimed granular pyrogenic silica. Other silica types are mentioned in col.12. None are mentioned as being pyrogenic silica. All appear to be precipitated silicas.

The deficiencies of Deller et al., Hasenzahl et al. and the Press Release are discussed above.

It appears that the art has been assembled based on the teachings provided within Applicants' specification. Even with that teaching, which is improperly relied upon, the art,

taken alone or in combination, does not suggest a path which would have allowed one to arrive at the invention as now claimed except by serendipity.

Further, even if one deems a *prima facie* case to have been properly established, the results shown in the Table, *supra*, show that there is a criticality to the synthetic silica employed. Further it is submitted that the art, relied upon, is not suggestive of the results achieved. The results would be unexpected.

Again, should the Examiner consider a proper *prima facie* case to have been established, it is respectfully requested that the results disclosed in the specification are not suggested by the art of record and therefore are unexpected. The *prima facie* case should then be considered rebutted.

Reconsideration and withdrawal of the rejection are respectfully requested.

IV. Claims 1, 15-18, and 22-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Peterson et al. (US 6,004,584) in view of Deller et al. (US 5,776,240) and the Degussa press release titled “Dry Binder – A New Concept for Pressed Powders” (June 12, 2003). The rejection as to claims 1, 15-18 and 22-23 is respectfully traversed.

Peterson et al. teaches highly absorbent body powders. These powders do not appear to be feedstuffs, foodstuffs, or plant protection agents as required by the claims. There is clearly no indication of a composition containing a chemical intermediate as understood in the art.

Silicates including Aerosil® and Cab-OSil® here are mentioned in col. 3. as absorbents (the “active” ingredient.) Powder carriers are mentioned starting in col. 3 at line 44. None are silica of any type.

The deficiencies of Deller et al. and the Press Release are discussed above.

The carriers of Peterson et al. appear to be carbohydrate based. There needs to be significant changes that would need to be made to the Peterson et al. composition so that it resembles one that meets the description required by the claims.

It is submitted that the secondary references, taken alone or in combination, suggest those modifications- feedstuff, granular silica, forming an aggregate where the claimed ratio is met.

A proper *prima facie* case has not been established. Further, the experimental results presented in the specification would rebut such a case, should one deemed to have been established.

V. Claims 1 and 24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Technical Bulletin Pigments No. 31 (Degussa AG, November 1995) in view of Deller et al., Hasenzahl et al. and the Press Release. The rejection as to claims 1 and 24 is traversed.

Applicants submit the motivation necessary to combine The Technical Bulletin and Deller is absent.

The Technical Bulletin has been characterized by the Examiner as suggesting a silanized silica useful as an adsorbate for molasses in order to make a free-flowing binder.

The deficiencies of Deller et al., Hasenzahl et al. and the press release are discussed above.

There is no teaching of equivalency for the silicas of the primary and secondary references. One having ordinary skill in the art would not expect the silicas of The Technical Bulletin to exhibit similar properties as those of the secondary references-Deller et al., Hasenzahl et al. and the Press Release-since the taught applications are clearly different, *e.g.* Deller's granules are catalytic supports. The need for an equivalency teaching is suggested by, *e.g.*, BPAI opinion number 2009-009246, *supra*.

The substitution of one silica type for another appears to be based on an obvious to try rationale, which is not statutory obviousness. Further, the results provided within the specification are believed to be commensurate in scope with the claims as amended and would not be expected from the art relied upon. In short, if a *prima facie* case of obviousness is deemed to have been established, the results shown in the specification would rebut such a case.

Reconsideration and withdrawal of the rejection are respectfully requested.

CONCLUSION

All of the stated grounds of rejections have been properly traversed, accommodated, or rendered moot. Therefore it is respectfully requested that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for all allowance.

It is not believed that extensions of time are required, beyond those that may otherwise be provided for in accompanying documents. However, in the event that additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. 1.136(a), and any fees required therefore are hereby authorized to be charged to Deposit Account No. 02-4300, Attorney Docket No. 032301.440.

Respectfully submitted,
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